BUILDING CODE INFORMATION:

THE 2009 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC 2009).

AMERICAN SOCIETY OF CIVIL ENGINEERS: MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ANSI/ASCE 7–05, 2005.

AMERICAN WELDING SOCIETY: STRUCTURAL WELDING CODE – SHEET STEEL, 2nd ED., ANSI/AWS D1.3, 2008.

1.0 DESIGN ASSUMPTIONS

THE CITY OF PORTLAND PERMITTING AND INSPECTIONS DEPARTMENT MUST REVIEW AND APPROVE THE FOLLOWING DESIGN ASSUMPTIONS BEFORE THE SHOP DRAWINGS MAY BE USED.

ALL CONNECTIONS SHALL BE COMPLETE AS PER THE PLANS AND SPECIFICATIONS AT THE TIME OF INSTALLATION.

STRUCTURAL DESIGN CRITERIA:

1. DESIGN LOADS:
   - i. DESIGN WIND: LOCATION: PORTLAND, MAINE
     WIND LOAD (PER ASCE 2005 SECTION 6.0 COMPONENTS AND CLADDING):
     OCCUPANCY CATEGORY II
     BASIC WIND SPEED V = 100 MPH
     WIND EXPOSURE FACTOR = B
     IMPORTANCE FACTOR I = 1.0
     DEFLECTION CRITERIA: L/360 OF THE WALL FRAMING LENGTH.
   - ii. ROOF LIVE LOAD:
     SNOW LOAD: 42 PSF (GROUND SNOW LOAD 50 PSF) PLUS SNOW DRIFT LOADING WHERE APPLICABLE (PER ASCE 2005 SECTION 7.0)
     SNOW EXPOSURE FACTOR (Ce) = 1.0
     THERMAL FACTOR (Ct) = 1.2
     IMPORTANCE FACTOR (I) = 1.0

     WIND LOADS – COMPONENTS & CLADDING

     WALLS (– ZONE 4): P = +18.3 PSF / –20.0 PSF
     WALLS (– ZONE 5): P = +18.3 PSF / –24.5 PSF

     WIND LOADS – MWFRS

     ROOF (WIND NORMAL TO RIDGE): P = +5.1 PSF / –10.7 PSF
     ROOF (WIND PARALLEL TO RIDGE): P = –14.7 PSF
     WALL (WIND NORMAL TO RIDGE): P = +10.6 PSF / –12.0 PSF
     WALL (WIND PARALLEL TO RIDGE): P = + 10.6 PSF / –12.0 PSF
   - iii. ROOF LOADS: GRAVITY LOADING

     ROOF GRAVITY LOADING:

     MEMBRANE ROOF DEAD LOAD = 0.50 PSF 60 MIL EPDM ROOF MEMBRANE
     1.5 PSF ½" CDX PLYWOOD SHEATHING
     2.5 PSF WOOD 2x RAFTERS AT 16" OC
     2.2 PSF ½" GWB CEILING
     1.0 PSF MISCELLANEOUS
     W_T = 7.7 USE 10.0 PSF

     FLOOR GRAVITY LOADING:

     FLOOR DEAD LOAD = 1.5 PSF 2x WOOD FLOOR DECKING
     2.0 PSF WOOD JOIST AT 16" OC
     1.5 PSF MISCELLANEOUS
     W_T = 5.0 PSF

TABLE 1607.1: MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS (IBC 2009 SECTION 1607)
MULTIFAMILY DWELLINGS: PRIVATE ROOMS AND CORRIDORS SERVING THEM INCLUDING EGRESS STAIRS AND DECKS: LIVE LOAD = 40 PSF

DEFLECTION CRITERIA:

EXTERIOR WALLS = L/360

ROOF RAFTERS = L/240 LIVE LOAD

FLOOR JOISTS = L/360 LIVE LOAD

STRUCTURAL DESIGN CRITERIA:

1. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
2. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE SAFETY OF THE STRUCTURE AND PERSONNEL DURING ERECTION. THIS INCLUDES THE ADDITION OF THE NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
3. ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.

WOOD FRAMING NOTES:

1. STRUCTURAL LUMBER: ALL WOOD EXPOSED TO WEATHER SHALL BE PRESSURE TREATED BY THE FOLLOWING METHODS:

   ACQ, CA AND MCQ PRESSURE TREATED SOUTHERN PINE NO 2 DENSE OR BETTER LUMBER.

   Fb = 1100 PSI, Fv = 565 PSI
   Fc = 1400 PSI, E = 1600000 PSI

   NLGA GRADING RULES AGENCY / SPRUCE–PINE–FIR No. 2 OR BETTER
   Fb = 875 PSI, Fv = 70 PSI
   Fc = 425 PSI, E = 1400000 PSI

   STRUCTURAL COMPOSITE LUMBER: LVL Fb = 3100 PSI
2. DESIGN CODE: THIS BUILDING IS DESIGNED TO COMPLY WITH THE 2009 EDITION OF THE INTERNATIONAL BUILDING CODE, IBC 2009.
3. FASTENERS: COMPLY WITH RECOMMENDED FASTENING SCHEDULE OF THE INTERNATIONAL BUILDING CODE IBC 2009 UNLESS SHOWN OTHERWISE ON THE DRAWINGS.
4. SHEATHING: APA RATED 'EXPOSURE 1' PLYWOOD OR COMPOSITE PANEL:

LOCATION	THICKNESS	SPAN RATING	EDGE NAILING	FIELD NAILING
ROOF SHEATHING:	5/8–INCH	40/20	8d AT 6" OC	8d AT 12" OC
WALL SHEATHING:	½–INCH	16/0	8d AT 6" OC	8d AT 12" OC
FLOOR SHEATHING:	¾–INCH	48/24	8d AT 6" OC	8d AT 12" OC

5. SPIKE TOGETHER ALL FRAMING MEMBERS WHICH ARE BUILT–UP USING MULTIPLE 2x LUMBER.
6. PROVIDE PRESSURE TREATED LUMBER FOR ALL LUMBER IN CONTACT WITH MASONRY OR CONCRETE OR EXPOSED TO WEATHER.
7. ROOF SHEATHING: 5/8" APA RATED SHEATHING, EXTERIOR OR STRUCTURAL I OR II RATED SHEATHING, SPAN RATING 40/20. INSTALL SHEETS WITH FACE GRAIN DIRECTION PERPENDICULAR TO SUPPORTING MEMBERS.
8. WALL SHEATHING: 1/2" APA RATED SHEATHING, EXTERIOR OR STRUCTURAL I OR II RATED SHEATHING, SPAN RATING 32/16. INSTALL SHEETS WITH FACE GRAIN DIRECTION PERPENDICULAR TO SUPPORTING MEMBERS.

NOTES
NTS
TYPICAL NOTES

GENERAL NOTES:

1. **COPYRIGHT:**
   THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS INCLUDING VERIFYING EXISTING FINISH GRADE CONDITIONS. DO NOT SCALE THE DRAWING–ANY ERROR OR OMISSIONS SHALL BE REPORTED TO DOWNEAST STRUCTURAL CONSULTANTS WITHOUT DELAY. THE COPYRIGHTS TO ALL DESIGNS AND DRAWINGS ARE THE PROPERTY OF DOWNEAST STRUCTURAL CONSULTANTS, PLLC. REPRODUCTION OR USE FOR ANY PURPOSE OTHER THAN THAT AUTHORIZED BY DOWNEAST STRUCTURAL CONSULTANTS, PLLC IS PROHIBITED.
2. LIABILITY / DISCLAIMER;
   WHILE GREAT EFFORT HAS BEEN EXERTED TO INSURE THAT THESE CONSTRUCTION DRAWINGS ARE COMPLETE AND ACCURATE, DOWNEAST STRUCTURAL CONSULTANTS, PLLC, ASSUMES NO LIABILITY FOR ANY BUILDING CONSTRUCTED FROM THIS PLAN. ALL CONSTRUCTION DOCUMENTS PROVIDED BY DOWNEAST STRUCTURAL CONSULTANTS, PLLC ARE PROVIDED AS–IS. IT IS THE RESPONSIBILITY OF THE OWNER/BUILDER TO PERFORM BUILDING REVIEWS BEFORE BEGINNING CONSTRUCTION. THESE INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:
   - A. VERIFY ALL DIMENSIONS
   - B. REVIEW DEMOLITION PROCEDURES (WHERE REQUIRED) WITH A DESIGN PROFESSIONAL TO DETERMINE POSSIBLE STRUCTURAL INSTABILITIES AND DEVELOP A DEMOLITION PLAN.
   - C. VERIFY ACTUAL SITE CONDITIONS. ANY DISCREPANCIES ON THE PLANS MUST BE RESOLVED BY THE BUILDER PRIOR TO CONSTRUCTION. CONSTRUCTION OF ANY HOME SHOULD NOT BE UNDERTAKEN WITHOUT THE ASSISTANCE OF A QUALIFIED BUILDING PROFESSIONAL.

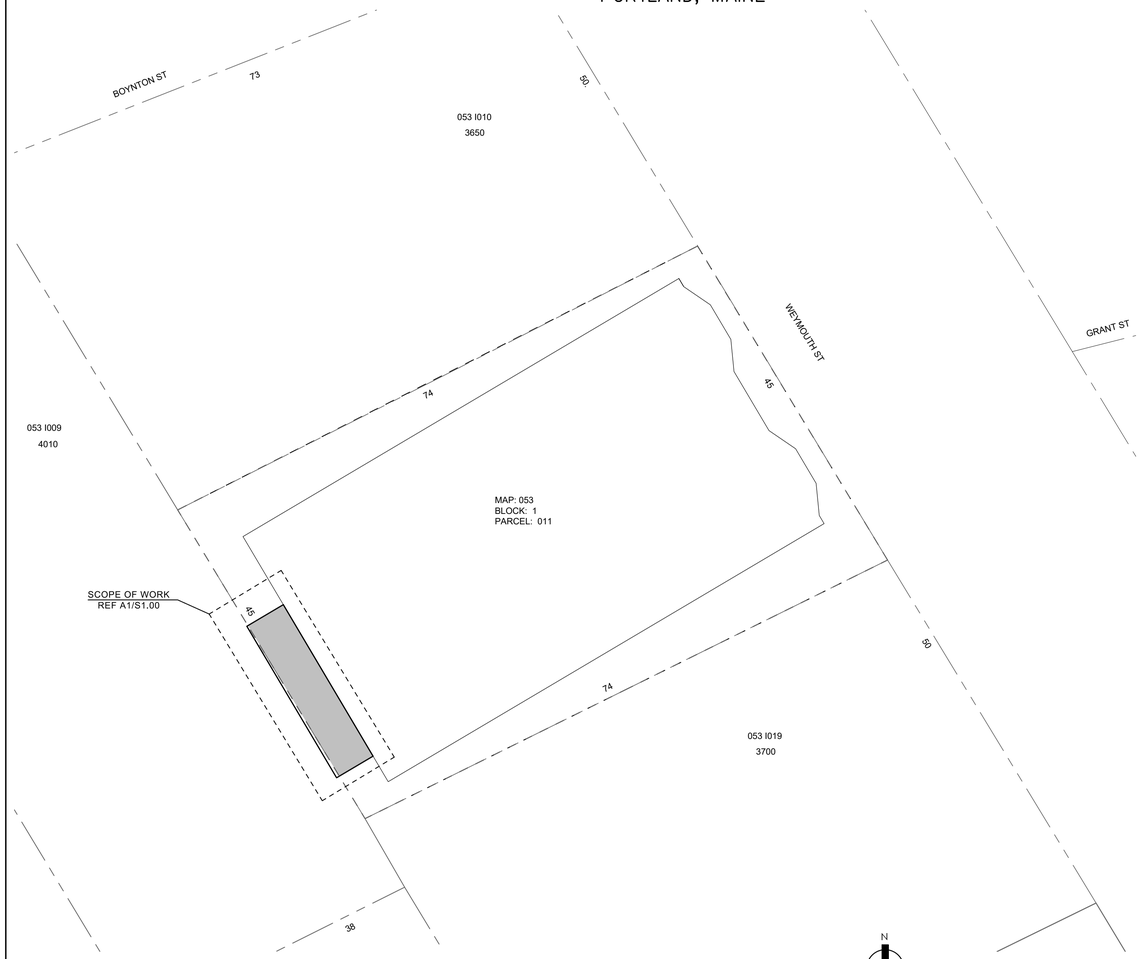
CONCRETE NOTES:

1. ALL CONCRETE WORK SHALL CONFORM TO ACI–318.
2. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 3500 PSI AT FOUNDATION WALLS AND FOOTINGS, 4000 PSI AT SLABS, MAXIMUM SIZE AGGREGATE SHALL BE 3/4".
3. ALL CONCRETE WITH THE EXCEPTION OF INTERIOR FLOOR SLABS SHALL BE AIR ENTRAINED.
4. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.
5. REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60 DEFORMED BARS SHALL BE DETAILED AND FABRICATED IN ACCORDANCE TO ACI–315 LATEST EDITION, AND PLACED IN ACCORDANCE WITH ACI–318.
6. SPLICES OF REINFORCING BARS SHALL BE IN ACCORDANCE WITH ACI–318. SPLICES OF WWF SHALL BE 6" MINIMUM.
7. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 UNLESS OTHERWISE NOTED.
8. CONCRETE COVER OVER REINFORCEMENT SHALL BE AS FOLLOWS:

   CONCRETE CAST AGAINST EARTH = 3"
   CONCRETE EXPOSED TO EARTH OR WEATHER = 2" FOR #6 AND LARGER
   = 1–3/4" FOR #5 AND SMALLER
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER = 3/4"

NOTES
NTS
TYPICAL NOTES–CONT

DECK RENOVATION
12 Weymouth Street
PORTLAND, MAINE



BUILDING PLAT PLAN (1)
SCALE: NTS

N W E S
REFERENCE NORTH

FASTENERS & CONNECTORS

FASTENER TYPE	SUBSTRATE	DESCRIPTION	PRODUCT
SCREWS / BOLTS	WOOD FRAMING OR PLYWOOD TO WOOD FRAMING	0.189"Ø x 2 ⅞" FLATHEAD TORX ® STRUCTURAL WOOD SCREW	HEADLOK® F2.9HL TIMBER SCREW
	WOOD STRUCTURAL MEMBER TO WOOD FRAMING	½"Ø TYPE ASTM 307 HD GALVANIZED STEEL CARRIAGE BOLT	
	WOOD FRAMING TO STRUCTURAL WOOD OR COMPOSITE WOOD FRAMING	0.228"Ø x 5" F5.0 HEX HEAD W/ OVERSIZED WASHER STRUCTURAL WOOD SCREW	LEDGERLOK™ FMLL005 TIMBER SCREW
	WOOD FRAMING OR PLYWOOD TO WOOD STRUCTURAL FRAMING	#14-20 x 2 ¾" FLAT HEAD WINGED, #3 TIP	HILTI KWIK PRO OR SIMPSON STRONG-TIE SDWS TIMBER SCREW
	WOOD TO CONCRETE OR CONCRETE MASONRY	¼"Ø x 1 ¾" TAPERED HEX HEAD W/ T-27 TORX RECESS	HILTI KWIK CON II CONCRETE AND MASONRY SCREW ANCHOR
HAND DRIVEN NAILS	WOOD FRAMING OR PLYWOOD TO WOOD FRAMING	8d OR 10d COMMON NAILS HOT DIPPED GAVANIZED	

Downeast Structural Consultants LLC
5 Oak Street, Cumberland, Maine 04021
Office 207.829.8015 Mobile 207.650.3083
Email craig@downeaststructural.com

OWNER:
GRANTWEY APARTMENTS, LLC
103 LOUDEN ROAD
SACO, ME

PREPARED FOR:
DREW ANDERSON, ESQ.
MURRAY PLUMB & MURRAY
75 PEAL ST
PORTLAND, ME

Project:

DECK RENOVATION
12 WEYMOUTH STREET
PORTLAND, MAINE

REVISIONS:

No.	Description	Date

Seal:

STATE OF MAINE
CHRISTOPHER F RAY No. 10547
LICENSED PROFESSIONAL ENGINEER

CURRENT ISSUE STATUS:
■ *SUBMITTED FOR APPROVAL*
Date: 1/4/2018

Drawing Title:

COVER SHEET AND GENERAL NOTES

Project No:	17166
Date	12/1/2017
Drawn by	CFR
Checked by	CFR

Drawing Number:
S.001

Scale: As Noted